

EUROPEAN PATENT OFFICE

Patent Abstracts of Japan

PUBLICATION NUMBER : 2000120691

PUBLICATION DATE : 25-04-00

APPLICATION DATE : 16-10-98

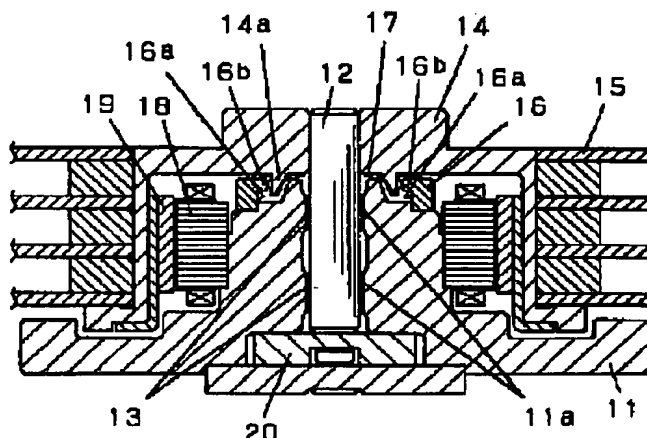
APPLICATION NUMBER : 10294935

APPLICANT : MATSUSHITA ELECTRIC IND CO LTD;

INVENTOR : OBATA SHIGEO;

INT.CL. : F16C 33/10 F16C 17/10 H02K 21/22

TITLE : FLUID BEARING SPINDLE MOTOR
DEVICE



ABSTRACT : PROBLEM TO BE SOLVED: To prevent the adhesion of the lubricant leaked outside by an impact of a fall to a disc by providing a rotary member with a projection part having a tapered inner peripheral surface, and providing a lubricant receiver means in an upper end surface of a fixed member in the periphery of the projection part, and coating the projection part and the part near there with an oil repellent agent.

SOLUTION: When the excessive quantity of a lubricant 13 existing in a clearance between a radial bearing part 11a and a rotary shaft 12 is leaked by an impact of a fall of a device, the lubricant 13 is leaked out of the radial bearing part 11a by the centrifugal force generated by the high-speed rotation of a flange 14, and moved between the flange 14 and a base 11, and repelled by an oil repellent agent 17 coated on a projection part 14a of the flange 14. Since the tapered shape of the projection part 14a is formed so that the inner diameter thereof at a tip side is larger than the inner diameter thereof at a flange 14 side and height of the tip part is equal to the height of a recessed part 16a, the lubricant 13 is moved downward by the centrifugal force, and splashed to the recessed part 16a side of a cover 16. With this structure, even if the lubricant 13 is leaked out of a bearing part, adhesion of the leaked lubricant to a disc is prevented, and the normal recording and replaying operation is secured.

COPYRIGHT: (C)2000,JPO